#### Factors Influencing Thai IT Professionals to Work in ASEAN Economic Community

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#### Abstract

Workforce mobility among ASEAN countries is made more possible after the realization of ASEAN Economic Community (AEC) in 2015. In particular, IT professionals are prone to relocate because IT skills are likely to be universal and transferrable across countries. Management challenge is to retain their IT talent. We address this issue by 1) exploring the extent to which Thai IT professionals are interested to work in ASEAN countries and 2) identifying the key factors that promote and restrain Thai IT professionals to work in these countries. We apply social cognitive theory (SCT: Bandura, 1986) and social cognitive career theory (SCCT: Lent, Brown & Hackett, 1994) as theoretical backdrop for our investigation. We attain 453 Thai IT professionals participating in our online survey. Results show that Thai IT professionals have moderate to high interest to work in ASEAN countries. The analysis of multiple regression report that outcome expectation and self-efficacy are the two key influential factors driving Thai IT professionals to relocate to ASEAN countries. Other personal and environmental factors such as English language skills, marital status and family influence are not significantly different from zero on their criterion prediction. In addition, we found that salary level is the only inhibiting factor for the mobility prospect: IT professionals with higher salary level show lower level of interest to work in AEC. Management should consider providing internal career progression that ties with motivational compensation package in order to retain talented IT professionals.

Keywords: IT professionals, workforce mobility, ASEAN economic community, Thailand, motivation, social cognitive career theory

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#### Introduction

The 21<sup>st</sup> century brings in a new business competitive advantage, information technology. It is considered one of the key factors to facilitate and support business growth and competition. A global CEO survey however shows that one of the problems in today's business is the shortage of IT professionals, especially those who have edging knowledge and skills in the field (PwC, 2014; ManpowerGroup, 2013). This has implication for business management worldwide. As such, it is imperative that organizations seek an appropriate strategy to attract and retain their IT talent.

The Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) 2015 agenda aims to develop and achieve a regional integration with free flow of goods, services, capital and skilled workforce. A stronger economic community after the AEC is materialized will generate a greater demand for skilled labour in the region (Plummer and Yue, 2009). That said, cross-border flows of skilled workers in ASEAN member states could lead to a greater outflow of Thai IT professionals to the region resulting in a shortage of IT professionals in Thailand. Consequently, business operations in Thailand could be disrupted if organizations are in shortage of high competence IT professionals.

The objective for this study is to 1) explore the extent to which Thai IT professionals are interested to work in ASEAN member states and 2) identifying the key factors that promote or restrain Thai IT professionals to work in these countries. In doing so, we contribute to the literature by manifesting the motives for Thai IT professionals to work in the ASEAN member states and providing management implication to attract and retain IT professionals for business competitiveness and sustainability.

## **Literature Review**

Social cognitive career theory (SCCT) explains the processes through which people form interests, make choices and achieve varying levels of success in educational and occupational pursuits (Lent, Brown & Hackett, 1994; Lent & Brown, 2006). In other words, employees seek to attain their career goals or students attempt to achieve academics success by engaging in selected activities in order to support the achievement of these goals. SCCT is concerned with two primary types of goals, i.e. choice goals and performance goals. Choice goals refer to the type of activity domain one wishes to pursue (e.g. intention to change one own career or change a workplace). As such, choice goals motivate workers to pursue their preferred vocational options. Performance goals refer to the level or quality of performance toward which one aspires within a given domain (e.g. performance level, grades). That said. performance goals help determine the level of success that individuals achieve at chosen tasks. This research aims to explain the extent to which Thai IT professionals are interested to move to other ASEAN member states and its driving force. As such, we conceptualized this cross-border mobility interest as the choice goal of Thai IT professionals.

Furthermore, Lent and colleagues, built on social cognitive theory (SCT: Bandura, 1986) have proposed that choice goals are driven by three key factors: self-efficacy, outcome expectation and contextual supports and barriers. These factors influence the activities which individuals would engage in so as to support the achievement of their

career goals, for example, participating in particular training and development programs, preparing own career plan or ladder, and changing jobs to gain some skills and experience and so on (Lent et al., 2005). Self-efficacy beliefs refer to "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). It is the beliefs in one's ability to perform the specific tasks required to succeed within a given domain under normative conditions and one's ability to cope with stress and obstacles when confronted (Lent & Brown, 2006). The beliefs in one's ability could be increased through personal performance accomplishment, vicarious learning, work experience and social persuasion (Bandura, 1997).

Outcome expectation are beliefs about the consequences or outcomes of performing particular behaviors. Several types of outcome expectations have been identified, such as anticipated social (e.g., benefits to one's family), material (e.g., financial gain), and self-evaluative (e.g., self-approval) outcomes (Bandura, 1986). Lent (2005) compared self-efficacy and outcome expectation in social cognitive career theory aspect such that "Whereas self-efficacy beliefs are concerned with one's capabilities (e.g. 'can I do this?'), outcome expectations involve imagined consequences of particular courses of action (e.g. 'if I try doing this, what will happen?')" (p. 104).

Previous research revealed that self-efficacy and outcome expectation influence employees' career choice decision (Sheu, et al., 2010), women engineers' intention to leave (Singh, et al., 2013) and expatriates' decision on taking international assignment (Doherty & Dickmann, 2013). Therefore, it is logical to assume that Thai IT professionals who have a strong belief in their abilities to work in other member states of ASEAN and cope with obstacles when confronted and those who anticipate career progression outcomes would show a stronger interest in cross-border working in AEC. Hence, it is hypothesized:

- H1 Self-efficacy is associated positively with Thai IT professionals' interest in cross-border working in AEC.
- H2 Outcome expectation is associated positively with Thai IT professionals' interest in cross-border working in AEC.

Contextual supports and barriers refer to proximal contextual variables that people anticipate will accompany their goal pursuit, be it facilitative influences (contextual supports) or obstacles (contextual barriers) (Lent & Brown, 2006). These context variables include for example family or own income, social status, family background language skills, availability of career role model, and presence of gender bias for a certain occupations. Previous research shows that language skills influence employees' decision to take international assignment or to relocate to work in another country (Remhof, Gunkel & Schlagel, 2013). Johnson and colleagues (2006) explained that language skills are critical for working internationally: this helps workers to communicate both in business environment and on a day-to-day living context, to understand the culture of the destination country, as well as to network professionally with colleagues, clients and communities while in different countries. Therefore, Thai IT professionals who have good English communication skills, which is the business language used in ASEAN countries, will have strong interest to work in AEC. Thus, it is hypothesized:

H3 English language proficiency is associated positively with Thai IT professionals' interest in cross-border working in AEC.

Furthermore, family influence and marital status are the other two factors commonly reported in the career literature as barriers to cross-border work relocation (Adler, 1986; Aryee, Chay, & Chew, 1996; Brett & Stroh, 1995; Konopaske, Robie, & Ivancevich, 2005). These researchers show that those who are married, have family influence, or want to live near family members tend to have lower interest to take global assignment. Consistently, we expect to find similar results where Thai IT professionals are reluctant to work in AEC should they are married or have strong family influence. It is hypothesized:

- H4 Family influence is associated negatively with Thai IT professionals' interest in cross-border working in AEC.
- H5 Differences in marital status result in differences in Thai IT professionals' interest in cross-border working in AEC.

#### **Research Methods**

#### Sample and Procedures

This research examines Thai IT professionals' interest to work in AEC, influential factors and restraints. Our target respondents are Thai IT professionals who are currently working in private organizations. We adopted a judgmental sampling approach to attain 453 respondents participating in our online survey, access opened from April 11 to May 15, 2014. Our sample is comprised of 362 male and 91 female respondents. The majority of our respondents are aged 26-35 (70%), their current monthly income is Baht 20,000 – 40,000 (USD 600 – 1,200) (60%), attained bachelor's degree education (61%) and master's level (33%).

All the measures adopted for this research, when operationalized, were translated into Thai and we followed the procedures recommended by Brislin (1990) for the translation of the survey. A pilot test of Thai translation was conducted and Cronbach's alpha obtained for all measures were greater .70 (Nunnally, 1978). Details of each measure are presented next.

#### Measures

#### Interest in cross-border working in AEC

Interest in cross-border working in AEC assesses the extent to which respondents are interested to work in other member states of AEC. We adopted the 7-point Likert scale (1 = weakest interest, 7 = strongest interest) used in previous research on career choice decision, job change and relocation (Lent & Brown, 2006).

## Self-efficacy

Self-efficacy is the beliefs in one's ability to perform the specific tasks required to support the achievement of one's goals. We adopted the 12-item scale used by Tharenou (2003) in measuring confidence in one's ability to work and live in AEC, on an 11-point scale ranging from 0 being high uncertainty to 10 being high certainty. Sample items were "work in a country in which I know no one when I first arrive", "adapt my behavior to fit into the culture", and "coordinate with colleagues or clients in different culture". Coefficient alpha in our survey is 0.96 suggesting a strong internal consistency of this measure.

## Outcome expectations

Outcome expectations were respondents' expectations of how likely they were to gain valued outcomes from relocating to member states of AEC for a job. We adopted the scale used by Adler (1986) in measuring expected career progression from working in AEC, on an 11-point scale ranging from 0 being not at all likely to 10 being extremely likely. Sample items were "higher position", "higher salary", and "quicker in career success". Coefficient alpha in our survey is 0.91.

## Language skills

We adopted language proficiency scale used by Remhof and colleagues (2013) in measuring English language skills of the respondents, on a 5-point scale ranging from 1 being very poor and 5 being excellent. We assess only English language proficiency because it is the business language in ASEAN community.

## Family influence

We adopted family influence measure on taking international jobs used by Tharenou (2003). These 7-point items scored from 1 (strongly disagree) to 7 (strongly agree). Sample items were "family ties have a strong influence on my taking a job in AEC", and "family approval and support are important to my taking a job in AEC". We attain the coefficient alpha at 0.92 suggesting a high internal consistency measure.

## Marital status

We categorized respondents into 4 groups including "Single and live alone", "Single but live with family", "Married but no children", and "Married and have children". We have 76% single respondents: 43% are single but live with family and 33% are single and live alone. Twenty-four percent of our respondents are married and half of which have children while the rest do not have children.

## Controls

Controls were used to increase the robustness of results allowing us to identify the unique links of the major predictors with interest in cross-border working in AEC. We control for age, gender, income and education level because these demographics could influence the relationships of variables established in the hypotheses.

## **Data Analysis and Results**

### **Descriptive Statistics**

Table 1 shows means, standard deviation and correlations of the measures. Results suggest that these variables are correlated in the direction as theorized in the literature. We further tested the hypotheses next.

Variables	М	SD	1	2	3	4	5
1 Interest in cross-border working in AEC	5.12	1.19					
2 Self-efficacy in working internationally	6.62	2.17	.25 **				
3 Outcome expectations on career progression	7.45	1.97	.35 **	.59 **			
4 Family influence	4.64	1.27	04	20 **	13 **		
5 English language proficiency	3.36	0.78	.11 *	.54 **	.30 **	.18	

 Table 1 Mean, Standard Deviation and Correlations

\*\* p < 0.01 (2-tailed), \* p < 0.05 (2-tailed)

## Hypothesis Testing

Hypotheses 1-3 predicted that self-efficacy, outcome expectations and English language proficiency are associated positively with Thai IT professionals' interest in cross-border working in AEC. Regression results reveal that self-efficacy and outcome expectations influence the level of interest in cross-border working in AEC ( $\beta_{self-efficacy} = .13$ ; p < .05;  $\beta_{outcome\ expectations} = .28$ ; p < .001) and that English language proficiency is not significantly different from zero on its influence on employee interest to work in AEC (Table 2). Thus, H1 and H2 are accepted.

Hypothesis 4 predicted that family influence will have negative association with Thai IT professionals' interest in cross-border working in AEC. As shown in Table 2, the family influence on interest in working in AEC is not significant and thus we cannot reject the null hypothesis that family influence is not associated with level of interest to work in AEC.

Variables	Interest in Cross- Border Working in AEC
Study variables	
Self-efficacy in working internationally	.13 *
Outcome expectations on career progression	.28 ***
English language proficiency	01
Family influence	.03
Controls	
Male	.04
Age	.01
Income	18 **
Education	.04
*** 1 . 0.001	

# Table 2 Regression Analysis on Factors InfluencingThai IT Professionals to Work in AEC

\*\*\* *p* value < 0.001

\*\* p value < 0.01

p value < 0.05

Hypothesis 5 predicted that respondents with different types of marital status have significant difference on their interests to work in AEC. We categorized respondents into 4 groups including "Single and live alone", "Single but live with family", "Married but no children", and "Married and have children". Analysis of variance in Table 3 suggests that there is no significant difference among these four types of marital status hence H5 is rejected.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.361	5	1.672	1.190	.313
Within Groups	627.962	447	1.405		
Total	636 322	452			

 Table 3 Analysis of Variance on Different Types of Marital Status

 and Interest in Cross-Border Working in AEC

#### Discussion

This research examines the extent to which Thai IT professionals are interested to work in the member states of AEC and its influential factors. We adopt social cognitive career theory and tested empirically the influences of self-efficacy, outcome expectations and contextual supports and barriers on Thai IT professionals' interest to work in AEC. This paper contributed to career literature by providing supportive evidence from a novel context of ASEAN economic community, which will be realized in December 2015. Our study provided management implication to attract and retain Thai IT professionals for their business competitiveness and sustainability.

Our results suggest that Thai IT professionals have moderate to high interest to work in ASEAN countries (mean score = 5.12 / 7) (Table 1). Consistent with previous research (Sheu, et al., 2010; Singh, et al., 2013; Doherty & Dickmann, 2013), we found that self-efficacy and outcome expectation are key influential factors on Thai IT professionals' career interest in AEC. Outcome expectation on career progression is a major contributing factor influencing Thai IT professionals' interest in cross-border working in AEC ( $\beta_{outcome expectations} = .28$ ; p < .001). Its effect size is doubled that of self-efficacy on career choice in AEC member states ( $\beta_{self-efficacy} = .13$ ; p < .05). Together, this suggests that those IT professionals who expect a progression on their career and believe in their capabilities to work in AEC are likely to move to other ASEAN countries once the free flow of skilled workforce is made possible. This poses the challenge to management to pay attention to the group of IT professionals who have unfavorable experience with career progression but are confident in their employability in international context.

In the view of Thai IT professionals, English language proficiency does not influence their decision to work in AEC. This could result from the nature of work in IT where the technical expertise comes first and computer language and programming are perhaps more important than English language. Moreover, the fact that most of interactions in the IT environment are devised through non-face-to-face channels, e.g. emails and network logs, as opposed to the face-to-face communication, employees have some lagged time to make sense of the message and correspond to these emails accordingly. Consequently, English language proficiency level may not play a major role on employees' decision to work in AEC.

Moreover, other contextual factors, i.e. family influence and marital status are not associated with the level of interest to work in AEC. This means that Thai IT professionals could make a career choice to work in AEC even more easily because family and spouse are not the barriers to career in AEC as shown in previous research (Konopaske, Robie, & Ivancevich, 2005). It is possible that the distance from Thailand to other AEC member states are relatively close, time zone difference is relatively small, and finally convenient transportation channels between countries also count. Therefore, those who work in different member states, with some support from communications technology, they can virtually communicate face-to-face with their family members and spouse, and discuss the issues or concerns with them while working in different countries. Home visits are not an issue either owing to a short distance countries and convenient transportation channels. Therefore, family influence and marital status do not significantly influence Thai IT professionals' interest on taking a job in ASEAN countries.

Furthermore, we found an interesting result here. As shown in Table 2, income is negatively associated with Thai IT professionals' interest to work in AEC ( $\beta$  = -.18; p < .01). This means that those with higher income are more reluctant to work in AEC. It is possible that perceived cost of switching jobs to AEC is much higher among those with higher income comparing to those with lower salary. This suggests that organization can adjust the salary level of IT professionals to be more competitive so as to retain IT professionals with the firm. Future research could further explore the underlying reason of this relationship.

There are, however, certain limitations that may need to be considered when interpreting these findings. The cross-sectional nature of the data means that causality cannot be inferred. Future research could apply a longitudinal strategy to research to test the causal relationships established in this research. We have a male dominant sample for this study (90% male and 10% female) which could be biased on the findings. This male and female ratio for IT professionals are however consistent with the population ratio reported at the national level survey (National Statistics Organization, 2011). Therefore, our sample is a good representatives of the IT professionals population. Next, our research explores potential outflow migration of IT professionals. It will be useful if future research is focusing on potential inflow migration studying the interest of IT professionals in other ASEAN countries to work in Thailand. Moreover, future research would also benefit from applying this same study but focus on interest in specific country in ASEAN because the business environment is varying in these countries, e.g. safety, stability of country politics, national culture, corruption, and business infrastructure.

Our findings are beneficial to management and HR manager to prepare some interventions to attract and retain IT talent for their organizations, especially those who have high IT competence for the organization future. A career path and career progression opportunity are critical to motivate IT professionals to remain with the organization. In addition, organization should involve them in the career planning process. This way, the offer made by the organization will be more relevant to the employees' expectation on their career progression. Moreover, organization should regularly join the salary survey for IT occupations so that the organization will have an up-to-date information on competitive pay for IT professionals.

#### Conclusion

This research explores the extent to which Thai IT professionals are interested to work in ASEAN countries and identifies the key factors that promote and restrain Thai IT professionals to work in these countries. We apply social cognitive theory (SCT: Bandura, 1986) and social cognitive career theory (SCCT: Lent, Brown & Hackett, 1994) as theoretical backdrop for our investigation. Results reveal 1) that Thai IT professionals have moderate to high interest to work in ASEAN countries; 2) that outcome expectation and self-efficacy are the two key influential factors driving Thai IT professionals to relocate to ASEAN countries; and 3) that English language skills and contextual factors, i.e. marital status and family influence are not significantly different from zero on their criterion prediction. In addition, we found that salary level is the only inhibiting factor for the mobility prospect: IT professionals with higher salary level show lower level of interest to work in AEC. Management should consider providing internal career progression that ties with motivational compensation package in order to retain talented IT professionals.

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